#### CHAPTER 6

# UNCRATING AND INSTALLING THE WARHEAD BODY SECTION

### 6-1. Preliminary Procedures

WARNING: The warhead body section contains explosives. All applicable safety regulations will be strictly enforced. Operations involving the handling of explosive items will be performed only in the areas specifically designated. These areas will meet quantity-distance requirements based upon the type and quantity of explosives involved. Where adjacent missiles are a hazard, a barrier will be provided for protection. Do not perform handling operations during electrical storms.

WARNING: Handling operations of the warhead body section will be supervised by qualified explosive personnel who thoroughly understand the hazards and risks involved. A minimum number of personnel will be permitted in or near the work location, and quantities of explosive materials will be kept to a minimum. Spilled explosive materials will be immediately removed, and the area thoroughly decontaminated before work continues.

- a. Check the threads of 13 hexagon-head bolts (15, fig. 6-4) for damage that may impair proper installation of the warhead body section to the rear body section. Replace any damaged bolts with acceptable bolts.
- b. Check the 13 mounting holes in the rear body section by inserting and removing acceptable mounting bolts. Visually inspect the threaded inserts after removing the bolts to assure that the inserts are properly seated and not broken.

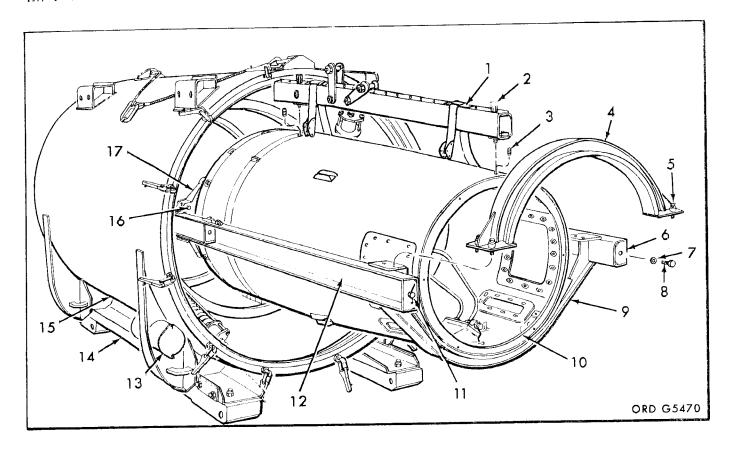
*Note.* If the helicoil is defective, or not properly seated, notify the supervisor.

- c. In the rear body section, install three guide pins in mounting holes 7, 8, and 13 as shown in figure 6-5.
- d. Inspect the six mounting holes at the rear of the forward body section for damage that may impair proper installation with the warhead body section. If any holes are camaged, notify the supervisor.

## 6-2. Uncrating the Warhead Body Section

- a. Perform an inspection of the warhead body section container, as prescribed in paragraph 3–5.
  - b. (Deleted).
  - c. Remove the container cover (par. 3-6c).
- d. Remove the Equipment Maintenance Log (EML) from the log tube (13, fig. 6-1), and check that the warhead body section sorial number agrees with the serial number in the EML.
- e. Store the EML and other papers in accordance with local directives.
- f. Check the threads of the six for ard body section mounting bolts (3, fig. 7-8) for damage which may impair proper installation of the forward section to the warhead body section.
- g. Check the six mounting holes at the forward end of the warhead body section by inserting and removing acceptable tolts. Visually inspect the threaded inserts after removing the bolts to assure that the inserts are properly seated and not damaged.

Note. If thread damage to the mounting bolts is evident, replace them with acceptable bolts. If the helicoil, or keylock, is defective, or not properly seated, notify the supervisor.



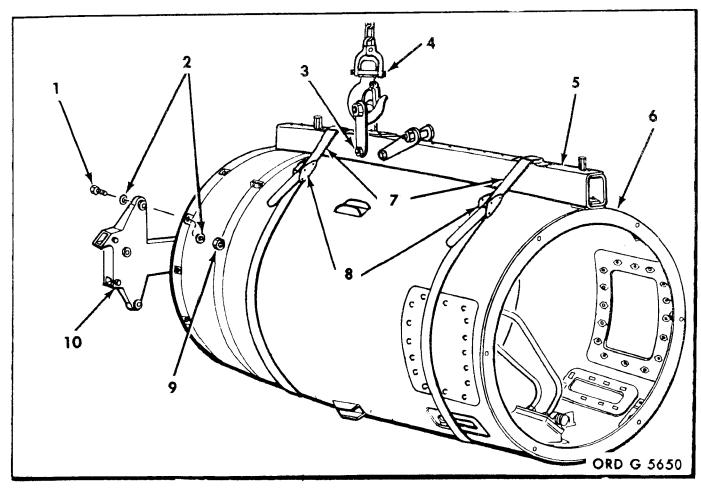
- 1- Warhead body section hoist beam
- 2—Captive bolt (2)
- 3—Plug 8530410 (2) or 9978716 (2)
- 4-Movable track clamp
- 5—Captive bolt (6)
- 6-Moveable track
- 7-3/4 in-id lockwasher (2)
- 8-3/4-10 X 1-14 hex-hd screw MS35297-183
  - (2) or hex-hd bolt 215199(2)

- 9—Movable track cradle
- 10-Warhead body section
- 11-Safety wire
- 12—Movable track
- 13-Log tube
- 14-Warhead body section container base
- 15-Warhead body section container
- 16—Captive bolt (4)
- 17—Thrust mount bracket

Figure 6-1. Uncrating and crating the warhead body section

- h. Inspect the underside of the right moveable track and the stationary tracks for the presence of stops. If stop, or stops, are missing, notify supervisor.
- i. Cut and remove the safety wire (11, fig. 6-1) through the heads of the hexagon-head screws (8) that secure the moveable tracks (6).
- j. Remove the hexagon-head screws (8) and lockwashers (7) that secure the moveable tracks to the stationary tracks.
- *k*. Slide the moveable tracks and the attached warhead body section out of the container until the moveable tracks contact the stops.
- CAUTION: To avoid damaging the bolt retaining pin, alternately loosen bolts that se-

- cure moveable track clamp to moveable track assembly.
- l. Loosen the captive bolts (5, fig. 6-1) that secure the moveable track clamp (4) to the moveable track (6) at the forward end of the movable tracks. Remove the movable track clamp.
- m. Inspect the "T" hook adapter and the exterior of the warhead body section for damage and proper markings; report any damage to the supervisor. Maximum permissible movements (measured at the skin surface) of the upper end of the "T" hook adapter (6, fig. 6-4) are: 7/64 inch longitudinal, 1/32 inch lateral, and 1/32 inch vertical.



- 1-3/8-16 X 3 hex-hd screw (6)
- 2-25/64 in-id fl washer (12)
- 3-Rear lift point
- 4—Falling hook
- 5-Warhead body section hoist beam

- 6-Warhead body section
- 7—Safety strap (2)
- 8-Buckle (2)
- 9-3/8-16 hex nut (6)
- 10—Thrust mount bracket

Figure 6-2. Removal of the warhead body section.

n. Remove the two plugs (3, fig. 6-1) from the warhead body section hoist beam attach holes.

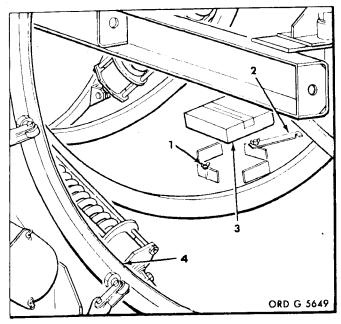
WARNING: Check the threads of the captive bolts (2) on the warhead body section hoist beam (1) and the bolt holes in the warhead body section for serviceable condition.

o. Install the captive bolts in the hoist beam attach holes, and secure the warhead body section hoist beam to the warhead body section by alternately tightening the two captive bolts.

WARNING: The two captive bolts on the warhead body section hoist beam (5, fig. 6-2) must be completely engaged before installing the two safety straps (7) to insure proper installation of the safety straps.

CAUTION: Position the safety strap buckles (8) near the hoist beam so that the buckles will not touch the warhead body section (6).

- p. Position the two safety straps of the warhead body section hoist beam around the warhead body section, and insert the end of each strap through its respective buckle; pull the two safety straps tight.
- q. Attach the falling hook (4) of a hoisting device capable of lifting 5,000 pounds to the rear lift point (3) of the warhead body section hoist beam, and take up the slack in the hoist chain.



- 1-Wing nut
- 2-Holddown bar
- 3-Accessory carton
- 4-Warhead body section container

Figure 6-3. Removal of the accessory carton.

r. Loosen the captive bolts (16, fig. 6-1) that secure the thrust mount bracket (17) to the rear end of the moveable tracks.

CAUTION: Manually guide the warhead body section to prevent contact with any obstruction on the moveable tracks.

- s. Lift the warhead body section sufficiently to clear the moveable tracks. Complete the inspection of the warhead body section. Slide the moveable tracks into the container (15), and install the two tracklocking bolts and washers.
- t. Remove the hexagon-head bolts (1, fig. 6-2), flat washers (2), and hexagon nuts (9), and remove the thrust mount bracket (10) from the rear end of the warhead body section.
- u. Inspect the rear warhead body section mounting holes for damage.

## 6-3. Installing the Warhead Body Section

Note. Insure that the missile is in the flight position, with the self-locking pins (view A, fig. 9-1) inserted through the lower handling ring segments, prior to mating the warhead body section to the rear body section.

- a. Lift the warhead body section (7) fig. 6-4), and mate with the forward end of the rear body section (3).
  - b. Install two hexagon-head bolts (15)

- and flat washers (14) through the boltwells (13) in the warhead body section at the right and left of top center, but do not tighten. Install the remaining bolts and washers through the boltwells in the warhead body section where guide pins are not installed.
- c. Tighten the bolts which have been installed.
- d. Remove the guide pins, and install the remaining bolts and washers.
- e. Tighten the hexagon-head bolts to a torque value of 90 pound-inches, alternating as shown in figure 6-5.
- f. Lower the falling hook enough to remove tension from the hoist cable.
- g. Alternating as shown in figure 6-5, back off each bolt (one at a time) approximately two turns; then, torque each bolt to the value given in table 15-9.
- h. Remove the falling hook (2, fig. 6-4) from the warhead body section hoist beam (1).
- *i*. Disconnect the two safety strap buckles, and remove the warhead body section hoist beam.
- *j*. Liberally coat the threads of the plugs (3, fig. 6-1) with corrosion-preventive compound (soft film) before installing in the warhead body section.
- k. Install two plugs in the hoist beam attach holes in the warhead body section.
- l. Loosen the two wing nuts (1, fig. 6-3); slide back the holddown bar (2); and remove the accessory carton (3) from inside the warhead body section container (4).
- m. Inspect and inventory the contents of the accessory carton against the packing list. Report any damaged or missing parts to the supervisor.
- n. Slide the holddown bar to the locked position, and tighten the wing nuts.

Note. Perform o and p below on warheads received with three-part boltwells.

o. Position the three boltwell covers (8, 12, fig. 6-4) on the warhead body section, and

assemble with two flathead screws (9) and boltwell cover nuts (10).

p. Secure the assembled boltwell covers (4) to the warhead body section (7) with four flathead screws (5); torque the screws and then the boltwell cover nuts (10) to the torque value prescribed in table 15-9.

Note. Perform q below on warheads received with single piece boltwells.

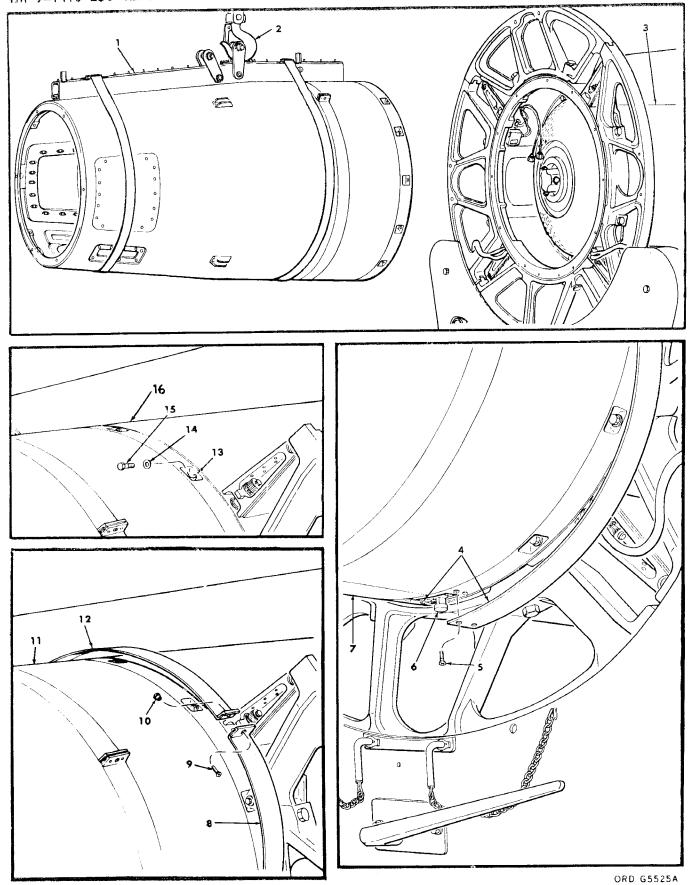
- q. Position the boltwell cover (12) on the warhead body section (11), and secure with the flathead screw (9) and boltwell cover nut (10).
- r. Tighten the boltwell cover nut to the torque value given in table 15-9.
- s. Remove the forward warhead body section boltwell cover.
- t. Inspect for presence and correct number of bolts and flat washers that join the forward warhead section to the rear warhead section.

CAUTION: Tightening of the attach bolts in the sequence shown in figure 6-6 will prevent stress and damage to the frame members of the forward and rear warhead sections.

u. Alternating as shown in figure 6-6, back

off each bolt (one at a time) approximately two turns; then, torque each bolt to 120-pound-inches.

- v. Install the forward warhead body section boltwell covers, and torque the boltwell cover nut to the value given in table 15–9.
- w. Attach the hexagon-head bolts (1, fig. 6-2), flat washers (2), and hexagon nuts (9) to the thrust mount bracket (10). Remove the track locking bolts; slide the movable tracks (12, fig. 6-1) out of the warhead body section container (15); and install the thrust mount bracket to the moveable tracks.
- x. Install the moveable track clamp (4) to the moveable track (6), and secure with the captive bolts (5).
- y. Slide the movable track into the container, and secure it to the stationary track with the hexagon-head screws (8) and lock washers (7). Safety-wire the bolts to prevent movement of the tracks during shipment.
- z. Install the container cover (fig. 3-5), and secure it with the quick-release clamps. Return the extension handle to the log tube, and secure the log tube cover plate with the wing nuts.



 $Figure \ 6-4. \ Removal \ and \ installation \ of \ the \ warhead \ body \ section.$ 

- 1-Warhead body section hoist beam
- 2-Falling hook
- 3—Rear body section
- 4—Boltwell cover 8166968
- 5-No. 10-32 X 3/8 fl-hd screw (4)
- 6-T-hook adapter
- 7—Warhead body section
- 8—Boltwell cover 8166968 (2) (warhead body section 11001 through 15744)
- 9—No. 10-32 X 17/32 fl-hd screw (2) (warhead body sections 11001 through 15744) or (1) (warhead body section 15745 and subsequent)
- 10—No. 10-32 X 7/32 boltwell cover nut (2) (warhead body sections 11001 through 15744) or (1) (warhead body sections 15745 and subsequent)
- 11-Warhead body section
- 12—Boltwell cover 8521079 (warhead body section 11001 through 15744) or 9019866 (warhead body section 15745 and subsequent)
- 13—Boltwell
- 14-21/64-in-id fl washer (13)
- $15-5/16-24 \times 31/32$  hex-hd bolt (13)
- 16-Warhead body section

Figure 6-4—Continued.

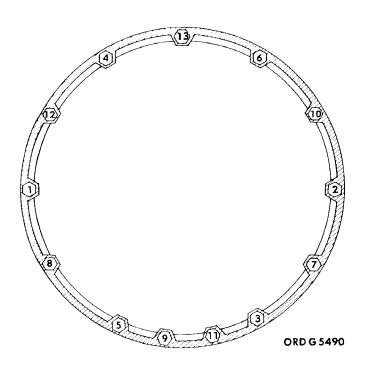
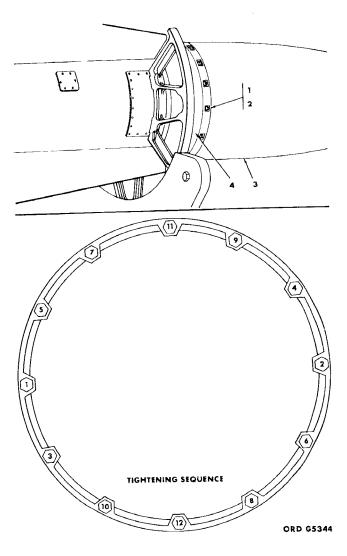


Figure 6-5. Tightening sequence for the warhead body section to the rear body section attach bolts.



- 1-5/16-24 X 1-3/32 hexagon head bolt (12)
- 2-0.328 in-id flat washer (12)
- 3—Forward warhead section
- 4-Rear warhead section

Figure 6-6. Inspection and retightening of the forward to rear warhead section attach bolts.